



REGION 5

CHICAGO, IL 60604

MEMORANDUM

SUBJECT: CLEAN AIR ACT INSPECTION REPORT
Conn-Selmer, Inc., Eastlake, Ohio

FROM: Matthew Walters, Environmental Engineer
AECAB (MN/OH)

THRU: Brian Dickens, Section Supervisor
AECAB (MN/OH)

TO: File

BASIC INFORMATION

Facility Name: Conn-Selmer, Inc.

Facility Location: 34199 Curtis Boulevard, Eastlake, OH 44095

Date of Inspection: February 7, 2024

EPA Inspectors:

1. Matthew Walters, Environmental Engineer
2. Patrick Miller, Environmental Engineer/Scientist

Other Attendees:

1. Tim Stull, Plant Manager, Conn-Selmer, Inc.
2. Lloyd Steel, EHS Coordinator, Conn-Selmer, Inc.
3. John Horvath, Senior Director of Manufacturing and Distribution, Conn-Selmer, Inc. (tour and closing conference only)

Contact Email Address: lsteel@connselmer.com

Purpose of Inspection: Hard chromium plating line, nickel electroplating line, lacquer coating line, and asphalt melting oven inspection

Facility Type: Musical instrument manufacturer

Regulations Central to Inspection: Chromium Electroplating NESHAP at 40 C.F.R. Part 63, Subpart N; Plating and Polishing Area Source NESHAP at 40 C.F.R. Part 63, Subpart WWWW; and Federally Enforceable Conditions of PTIO Permit Number P0123407

Arrival Time: 12:15 p.m.

Departure Time: 2:00 p.m.

Inspection Type:

- ☒ Unannounced Inspection
☐ Announced Inspection

OPENING CONFERENCE

- ☒ Presented Credentials
☒ Stated authority and purpose of inspection
☒ Small Business Resource Information Sheet not provided. Reason: Not a small business.
☒ Provided CBI warning to facility

The following information was obtained verbally from facility personnel unless otherwise noted.

Process Description:

The facility manufactures brass musical instruments and operates three 8-hour shifts, 5 days per week. Plating operations are performed during the first shift only. The hard chromium plating line includes one open surface plating tank equipped with a lateral exhaust system. The tank exhaust is routed to a composite mesh pad system to control chromic acid mist. The facility also controls the formation of chromic acid mist by utilizing a chemical fume suppressant to limit bath surface tension to less than 40 dynes/cm (measured by a stalagmometer), as specified by 40 C.F.R. § 63.342(c)(1)(iii). The nickel electroplating line at the facility includes two open surface plating tanks that are not exhausted. The hard chromium plating line area has a dedicated exhaust system that is controlled by a wet scrubber. A second wet scrubber controls exhaust from other parts of the facility, including the nickel electroplating area. The asphalt melting oven is equipped with a natural gas-fired afterburner to combust melting oven emissions. The lacquer coating line applies a clear coat to miscellaneous metal parts or products within a spray booth. The coatings applied at the lacquer coating line do not contain target HAP as defined in the 6H NESHAP.

Staff Interview:

- The mesh pad for chromic acid mist control is washed bi-weekly, and a full cleaning is performed quarterly.
- The sulfuric acid spill that occurred at the facility on October 5, 2023 was caused by the failure of a manufacture's valve on an IBC tote used for wastewater treatment. The facility now stores the sulfuric acid tote on a spill containment pallet.

TOUR INFORMATION

EPA Toured the Facility: Yes

Data Collected and Observations:

- Asphalt melting oven:
 - PTIO Condition C.3(c)(2) specifies that the combustion temperature within the afterburner when the emission unit is in operation shall not be less than 1,100°F.
 - The facility records afterburner temperature continuously with an analog data logger.
 - The temperature at the time of the inspection was approximately 1,250°F.
- Lacquer coating line:
 - PTIO Condition C.1(g)(1) states that qualification for the exemption specified under OAC rule 3745-21-09(U)(2)(h) is based upon the voluntary coating usage restriction of 3 gallons per day, when utilizing any of the following coatings: G.J. Nikolas & Co.- #12281 Gold-Tone Bake RFU or #12262 4.3 Brass-coat Bake RFU.
 - Inspectors viewed the coating storage area and found only coatings specified by the permit condition.
- Hard chromium plating line:
 - PTIO Condition C.4(c)(1) specifies that pressure drop of composite mesh-pad system shall be maintained within a range of 0.9 to 3.5 inches of water column while the emission unit is in operation.
 - The Magnehelic gauge measured a composite mesh-pad system pressure drop of approximately 1.2 inches of water at the time of the inspection.
 - Method 306B at Appendix A to 40 C.F.R. Part 63 specifies a method for surface tension measurements of tanks at decorative chromium electroplating and chromium anodizing facilities, including requirements for frequency of measurements.
 - Inspectors viewed the stalagmometer used by the facility to measure bath surface tension.
 - Surface tension monitoring records and procedures were requested for offsite review.
 - Housekeeping practices specified at Table 2 to 40 C.F.R. § 63.342 include the option to minimize spills of bath solution that result from dragout by collecting and treating in an onsite wastewater treatment plant any bath solution that drains or drips from parts as the parts are removed from the tank.
 - The hard chromium plating line area is drained to a sump that is routed to an onsite wastewater treatment plant.

- Nickel electroplating line:
 - Electrolytic process tank standards at 40 C.F.R. § 63.11507(a) specify that the owner or operator of an affected tank must either use a wetting agent/fume suppressant in the bath, capture and exhaust emissions to certain emission control devices, or use a tank cover over all of the effective surface area of the tank for at least 95 percent of the electrolytic process operating time.
 - Room air exhaust is controlled by a wet scrubber, but the nickel electroplating tanks do not have local exhaust.
 - Plastic balls were floating on the tank surface, which facility personnel indicated were used to prevent evaporation.
 - Tanks covers were not present at the time of the inspection.

Photos and/or Videos: were taken during the inspection and are listed in Appendix A.

Field Measurements: were not taken during this inspection.

RECORDS REVIEW

The following records were reviewed onsite:

1. Buffing and polishing machines baghouse pressure drop log
2. Daily lacquer usage log

CLOSING CONFERENCE

☒ Provided U.S. EPA point of contact to the facility

Requested documents:

- Nickel electroplating line documentation:
 - Notification of Compliance Status
 - Most recent annual certification of compliance report
- Hard chromium plating line documentation:
 - Operation and maintenance plan
 - Manufacturer's recommendations for stalagmometer operation and maintenance
 - Stalagmometer inspection records for the past year
 - Bath surface tension measurements from August 1, 2023 to February 7, 2024
 - Records of the date and time that fume suppressants were added to the bath from August 1, 2023 to February 7, 2024, along with records of the fume suppressant manufacturer and product name
- Most recent stack test reports for:
 - Hard chromium plating line composite mesh-pad system vent
 - Chromium scrubber vent

- Permit Evaluation Reports submitted to Ohio EPA for 2021 and 2022
- Identification of any processes that are subject to the 6H NESHAP

DIGITAL SIGNATURES

Report Author: **MATTHEW WALTERS**  Digitally signed by MATTHEW WALTERS
Date: 2024.04.01 15:19:05 -05'00'

Section Supervisor: **BRIAN DICKENS**  Digitally signed by BRIAN DICKENS
Date: 2024.04.01 16:22:48 -05'00'

Facility Name: Conn-Selmer, Inc.
Facility Location: 34199 Curtis Boulevard, Eastlake, OH 44095
Date of Inspection: February 7, 2024

APPENDICES

A. Digital Image Log

APPENDIX A: DIGITAL IMAGE LOG

Inspector Name: Patrick Miller **Archival Record Location:** *R5 Electronic Record Center/AECAB Library/Enf_Conn Selmer Eastlake_OH_24/Inspection 2024.02.07/Photos*

Image Number	File Name	Date and Time (EST)	Description of Image
1	PM_2024.02.07 (1).JPG	2024:02:07 13:10:32	Photohelic for measuring buffing and polishing machines baghouse pressure drop
2	PM_2024.02.07 (2).JPG	2024:02:07 13:11:55	Asphalt melting oven afterburner analog temperature logger
3	PM_2024.02.07 (3).JPG	2024:02:07 13:12:04	Asphalt melting oven afterburner analog temperature logger
4	PM_2024.02.07 (4).JPG	2024:02:07 13:13:24	Asphalt melting oven afterburner showing thermocouple location
5	PM_2024.02.07 (5).JPG	2024:02:07 13:17:42	Daily lacquer coating log
6	See CBI Supplement to this inspection report		
7	PM_2024.02.07 (7).JPG	2024:02:07 13:23:40	Magnehelic gauge measuring composite mesh-pad system pressure drop for the hard chromium plating line
8	PM_2024.02.07 (8).JPG	2024:02:07 13:23:44	Temperature controller at hard chromium plating tank
9	PM_2024.02.07 (9).JPG	2024:02:07 13:23:55	Temperature controller at hard chromium plating tank
10	PM_2024.02.07 (10).JPG	2024:02:07 13:24:08	Open surface chromium plating tank and composite mesh pad system
11	PM_2024.02.07 (11).JPG	2024:02:07 13:27:14	Temperature controller at cleaning tank prior to nickel electroplating
12	PM_2024.02.07 (12).JPG	2024:02:07 13:28:22	Open surface nickel electroplating tanks
13	PM_2024.02.07 (13).JPG	2024:02:07 13:29:07	Temperature controller at #1 nickel electroplating tank
14	PM_2024.02.07 (14).JPG	2024:02:07 13:29:15	Temperature controller at #2 nickel electroplating tank
15	PM_2024.02.07 (15).JPG	2024:02:07 13:35:27	Stalagmometer used for measuring chromium plating tank surface tension
16	PM_2024.02.07 (16).JPG	2024:02:07 13:40:05	Scrubbers for controlling room exhaust on the facility roof
17	PM_2024.02.07 (17).JPG	2024:02:07 13:41:05	Composite mesh-pad system exhaust stack
18	PM_2024.02.07 (18).JPG	2024:02:07 13:42:06	Scrubbers for controlling room exhaust on the facility roof